How to Secure WordPress – Complete Guide 2024 (blog.jirivanek.eu)

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WordPress is one of the most popular and widely used platforms for building websites in the world. Currently, it powers more than 40% of all websites worldwide. Its simple interface and rich customization options make it a popular choice for individuals and businesses. However, the popularity of WordPress also brings challenges, especially in the area of security. How to secure WordPress is a question many website creators ask, and there is no simple answer. Website security is a complex matter that requires time and effort.

In today’s world, websites are frequent targets of hackers and malware attacks. That’s why it’s important for website owners to be cautious and take steps to secure their sites. This article will focus on key aspects of WordPress security and provide you with practical tips and recommendations on how to protect your website from potential threats. These 16 tips and pieces of advice will help you secure WordPress to a level where it will be very difficult, perhaps even impossible, for anyone to breach such a site.
Security of WordPress should be a priority for every website administrator. In this article, I’ll help you understand how to achieve it and how you can make your WordPress site impregnable.

It All Starts with Web Hosting

Choosing web hosting is an important first step in securing WordPress right from the start. Many providers of traditional shared web hosting now view WordPress as an integral part of the internet ecosystem and have their Linux operating systems partially secured against various types of attacks. You may encounter hosting providers that have already implemented protection against multiple attempts to break into the administration password or have also implemented protection using Geo-IP.

Hosting is a fundamental and crucial component for your website. Not only will the speed of your website depend on its quality, but also its security. Therefore, don't hesitate to ask the provider about the parameters of the service before making a purchase.

You should primarily be interested in these parameters:

- Whether the web host provides a free SSL certificate for your website.
- The PHP version on the website (ideally as of the date of this article, 8.3. and 8.4.).
- Memory limit size (memory allocated to your website -> ideally starting at 256 MB as a base, preferably 512 MB).
- Max execution time (the time a script runs before the server forcefully terminates it – important for tasks like website migration using plugins).

- Whether you can change any directives using .htaccess files or .user.ini files.
- What basic security features the web host provides (Geo-IP protection, protection against brute force attacks, protection against DDOS attacks, etc.).

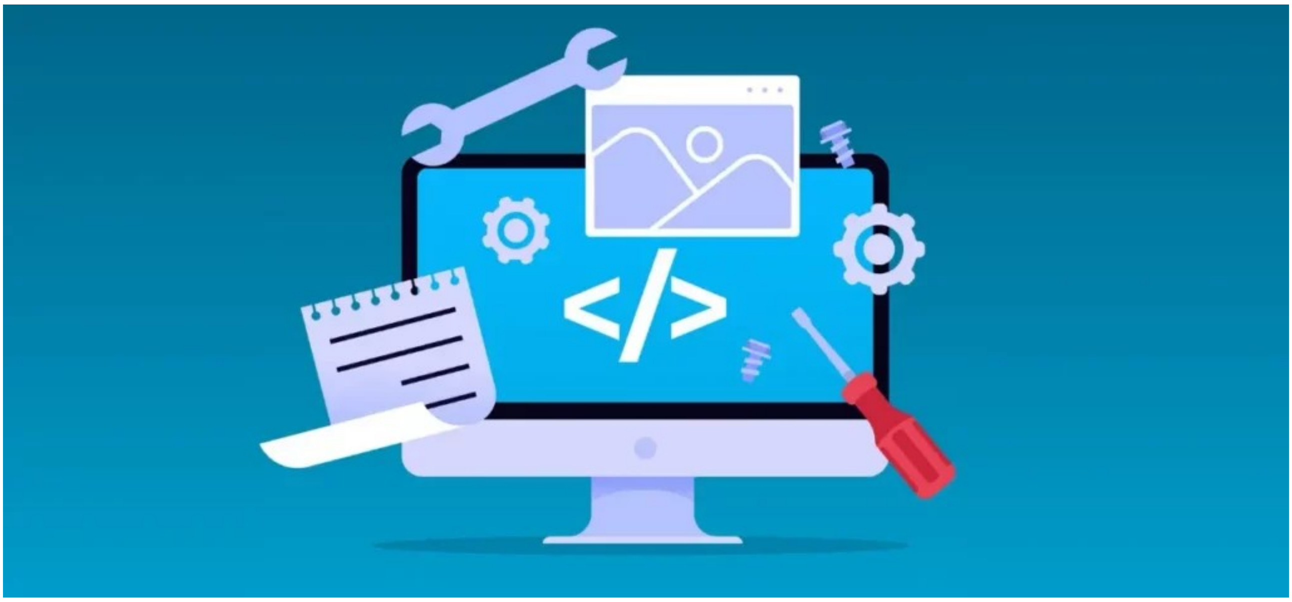
As you can see, the web hosting provider alone can do a lot for WordPress security, and even the Linux system on which your website runs can have basic security measures resolved natively. Ask questions. The price of web hosting may not be decisive because the rule that the cheapest web hosting is the best choice does not always apply. By also asking customer support for key details regarding the operation of your new website, you can easily determine how quickly such support responds to your inquiries and any future problems you may encounter. Quality customer support is essential for the successful operation and security of your web presence.

Why It’s Safer to Use HTTPS

SSL and the HTTPS protocol are essential in today’s world, for many reasons. First, let’s talk about what SSL and HTTPS are used for. The HTTPS protocol ensures encrypted communication between your website and the user’s computer viewing this website. In simple terms, it means that these two machines exchange data encryptedly. If someone were to intercept the data between these machines, they would only receive it in encrypted form and would not be able to determine what data these machines are exchanging.

From a security perspective, this is important, for example, when logging into the WordPress administration panel. Thanks to HTTPS, data such as login and password are sent to the server in an unreadable form, which no one in the middle can decrypt. This is crucial for securing WordPress and your website. You don’t want to send your password and login to the server in plain text, which anyone could easily uncover. Last but not least, Google also looks at HTTPS. If your website doesn’t use HTTPS, Google will likely penalize you, and your search results won’t be good. Google itself checks the security of the WordPress you’re using, and HTTPS is a key parameter for it. Therefore, make sure that the HTTPS protocol is part of your website, and choose a web hosting provider accordingly (see above).

Installation – User, Password, and Prefix (How to Secure WordPress Right from the Start)



To secure WordPress, many basic steps can be taken during the installation of this content management system itself. As a fundamental security rule, I can immediately mention using a very strong password for the MySQL database. Avoid using dictionary passwords, as they can be easily guessed. Use a password that is at least eight characters long. Utilize both lowercase and uppercase letters, numbers, and also include a special character (? ! #, etc.). By following this practice, you significantly increase the number of attempts a potential attacker would have to make to uncover such a password. This makes a brute force attack on MySQL practically impossible.

Three other elements that you can influence in terms of security during installation are table prefixes, username, and password. WordPress uses the wp_ table prefix by default during basic installation. Change it to your own. Any attacker automatically assumes that your table prefix will be the default, wp_. Don't make it easy for them; change the table prefix to any of your own (**abc_**, **my_**, **blog_**…).

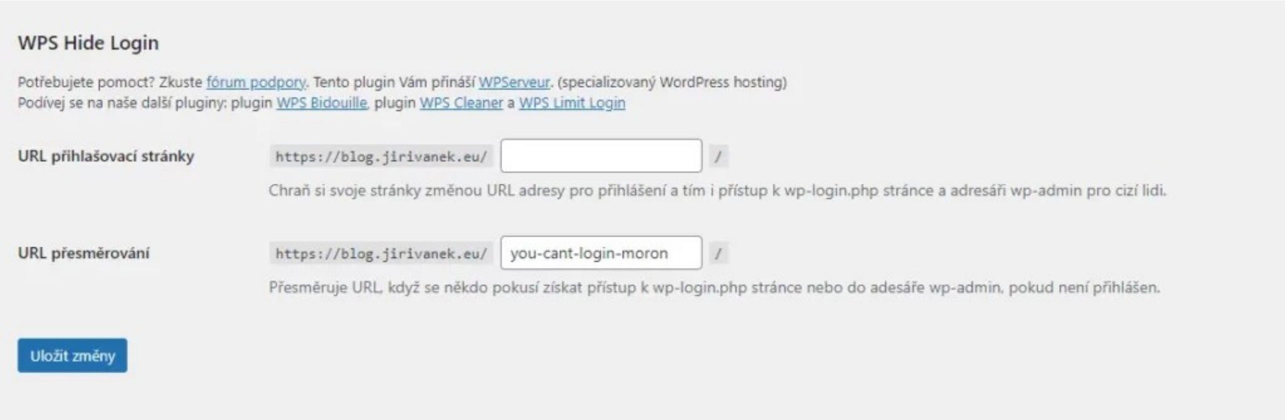
Regarding WordPress security, especially in administration, the key is the username and its password. Again, I refer to default values, where many users leave WordPress with the pre-filled admin user during installation. Modify your login and avoid using the admin user. For example, use your own name. The admin user will be the first user an attacker tries when attempting to break the password. As for the password, use the same practice described above for MySQL. At least eight characters and a combination of numbers, lowercase and uppercase letters, and special characters.

The ideal security state after installation looks like this:

- Custom table prefix
- Unique username (definitely not admin or administrator)
- High-quality password of at least eight characters

Protect Administration Access by Changing URL

WordPress has two possible paths for accessing the administration panel. One is domain.tld/wp-admin and the other is domain.tld/login.php. An attacker attempting to breach your website using a brute force attack will typically try one of these two addresses first. Therefore, if you're considering how to secure WordPress and its administration, it's wise to address this and change the URL. You can use the WPS Hide Login plugin to change the URL address. It's very straightforward; after activation, it adds an item to the WordPress settings and general tab where you can define your own administration URL address. Additionally, you can set a second address where users attempting to access the administration panel via the traditional path will be redirected. This could be, for example, a 404 page or any other informative page.



WPS Hide Login

Potřebujete pomoct? Zkuste fórum podpory. Tento plugin Vám přináší WPServeur. (specializovaný WordPress hosting)
Podívej se na naše další pluginy: plugin WPS Bidouille, plugin WPS Cleaner a WPS Limit Login

URL přihlašovací stránky: https://blog.jirivanek.eu/ /
Chraň si svoje stránky změnou URL adresy pro přihlášení a tím i přístup k wp-login.php stránce a adresáři wp-admin pro cizí lidi.

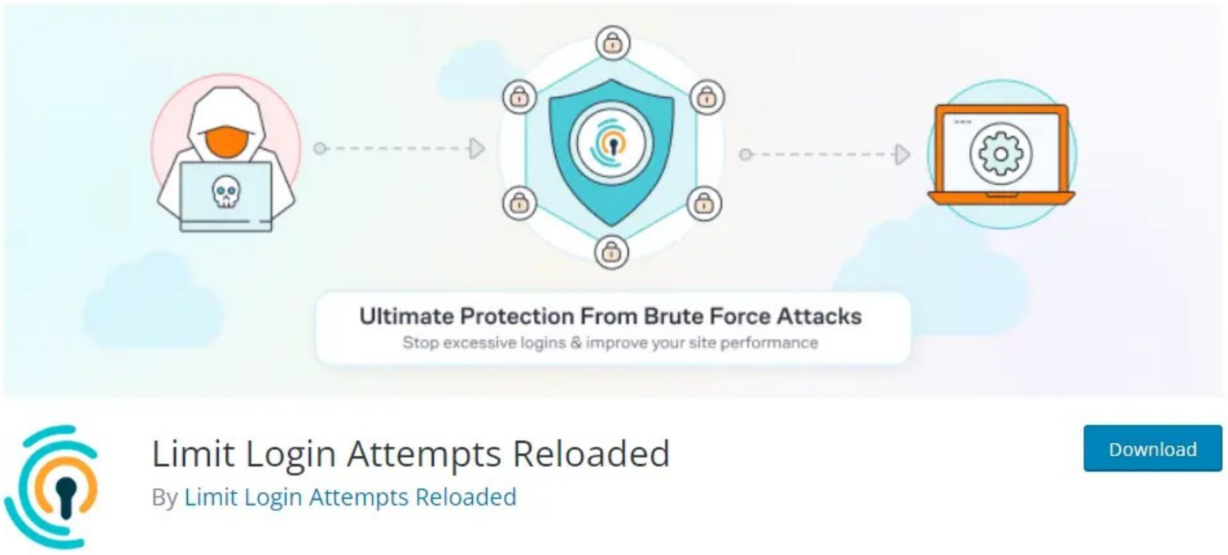
URL přesměrování: https://blog.jirivanek.eu/ you-cant-login-moron /
Přesměruje URL, když se někdo pokusí získat přístup k wp-login.php stránce nebo do adesáře wp-admin, pokud není přihlášen.

Again, from the perspective of securing WordPress and its administration, you make it more difficult for potential attackers. They won't know the address of your administration panel, making it challenging for them to attempt brute force attacks and guess passwords to gain access.

Set a Limit on Login Attempts to Administration

Another method to make it harder to reveal your password involves limiting the number of login attempts. You can achieve this conveniently using the Limit Login Attempts Reloaded plugin. Among other features, it allows you to set the following:

- Login Limitation: Restricts the number of login attempts (for each IP address).
- Adjustable Lockout Time: Modifies the duration a user or IP address must wait after being locked out.
- Remaining Attempts: Informs users about the remaining attempts or lockout time on the login page.
- Email Notification on Lockout: Notifies administrators via email about lockouts.
- Records of Failed Attempts: Displays records of all rejected attempts and lockouts.
- Whitelist/Blacklist IP Addresses and Usernames: Controls access to usernames and IP addresses.
- XML-RPC Gateway Security.
- WooCommerce Login Page Security.


Ultimate Protection From Brute Force Attacks
Stop excessive logins & improve your site performance
Download

Limit Login Attempts Reloaded

By Limit Login Attempts Reloaded

As you can see, with this plugin, you can configure a lot. If it doesn't suit you, there are also other plugins available in the WordPress repository that have similar functions. It's important to block users who will attempt an excessive number of login requests right from the start. This way, you won't give attackers a chance to break your password because the plugin will block them much earlier.

Two-Factor Authentication for Administration Access

The question of how to secure WordPress often revolves significantly around the administration interface right from the start. Therefore, if you wish, you can implement an additional layer of protection on your website in case someone manages to bypass all the security measures described above. This additional layer is two-factor authentication. Two-factor authentication adds an extra step to the login process and eliminates the risk of unauthorized access by someone who may know your login credentials for some reason.

This method adds an additional field to the login screen where you must enter a code generated by an application on your mobile phone. You may already be familiar with this process, such as when verifying payments in your bank, where you need to approve the payment with an additional method of authentication. It works the same way here. You connect your WordPress administration to the Google Authenticator app, which generates access codes for you. If someone were to somehow uncover your login and password, they still wouldn't be able to access the administration without your mobile phone. This is because they would be missing the second verification factor – the code from your mobile device.

If you want to take the security of your WordPress to the next level with this two-factor authentication, I have written a separate article on it, where you will find a detailed guide on both installation and activation of this second layer of security: How to Set Up Two-Factor Authentication for WordPress Administration.

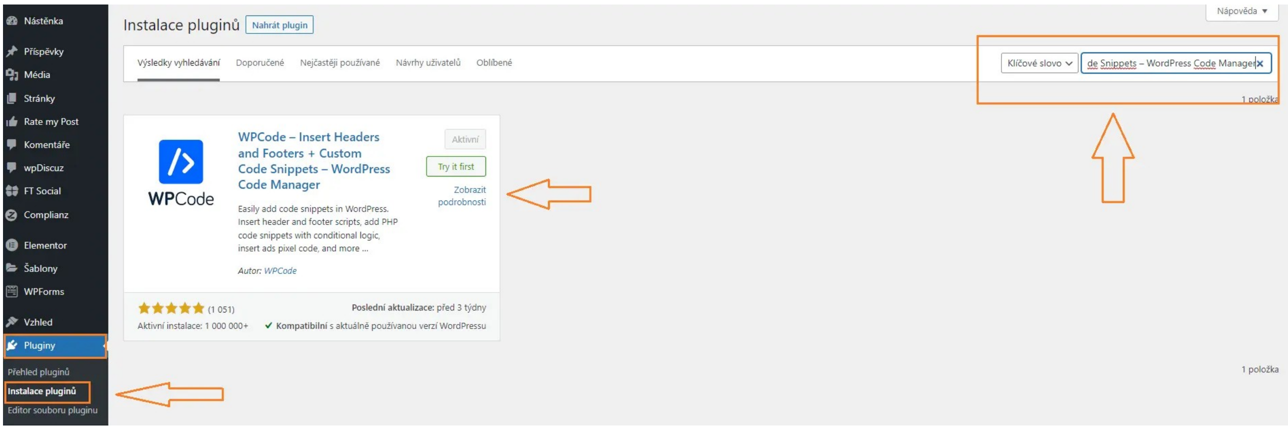
Disable XML-RPC

XML-RPC is one of the basic WordPress APIs that has been enabled by default since version 3.5, released in 2012. Therefore, every new WordPress installation has XML-RPC automatically activated. This WordPress functionality simplifies connecting to your website and interacting with it. For example, using mobile applications for WordPress management or various automation services. If you don't use XML-RPC on your website, it's better for WordPress security to disable it.

Disabling XML-RPC is very simple and can be done using this short snippet:

```
#How to Secure WordPress - Disabling XML-RPC
add_filter('xmlrpc_enabled', '__return_false');
```

If you’re not sure how to insert this snippet into your website, I’ve written a separate, relatively short article for this purpose, where you’ll learn how to use the WPCode plugin. Be sure to check it out here: How to Easily Disable XML-RPC in WordPress.



de Snippets – WordPress Code Manager

WPCode – Insert Headers and Footers + Custom Code Snippets – WordPress Code Manager

Easily add code snippets in WordPress. Insert header and footer scripts, add PHP code snippets with conditional logic, insert ads pixel code, and more ...

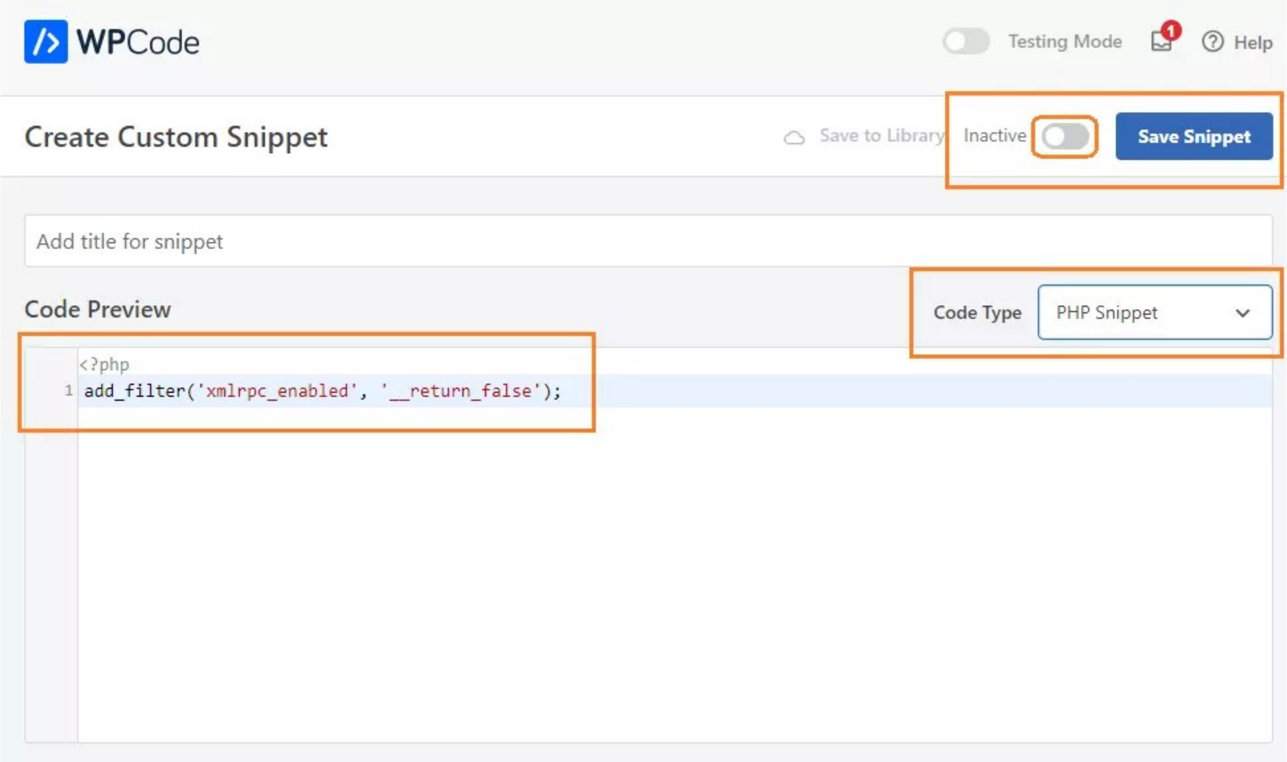
Autor: WPCode

★★★★★ (1 051)

Poslední aktualizace: před 3 týdny

Aktivní instalace: 1 000 000+

✓ Kompatibilní s aktuálně používanou verzí WordPressu



Code Type: PHP Snippet

```
<?php
add_filter('xmlrpc_enabled', '__return_false');
```

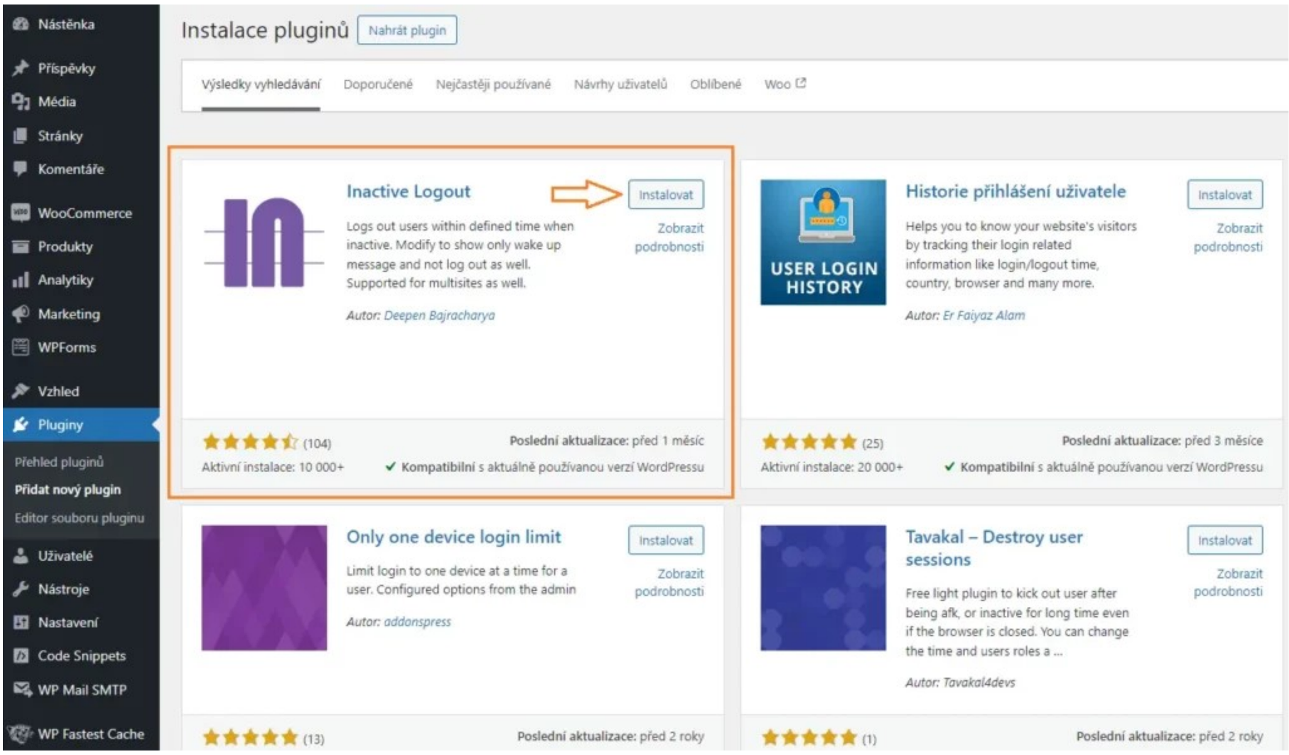
Automatic User Logout

Securing WordPress often involves paying attention to small details that may seem insignificant to some but contribute to the overall stability and security of the website. One such detail is automatic user logout from the administration panel. This

is particularly important in the case of multi-user websites, where multiple users in various roles besides the administrator work on the site.
You can imagine a scenario where a user walks away from their laptop while still logged into the WordPress administration panel. Such a laptop or desktop with open access to sensitive data can lead to significant problems. WordPress does not address automatic user logout natively, so we'll give it a little help.
All you need for this is the Inactive Logout plugin, which is available in the official WordPress repository.

You can install the plugin as follows:

- In the WordPress left menu, click on the "Plugins" button.
- In the new menu, click on "Add New Plugin."
- Now, in the upper right corner, type the key phrase "Inactive Logout" into the search field.
- WordPress will search for the plugin.
- Install and then activate the plugin.



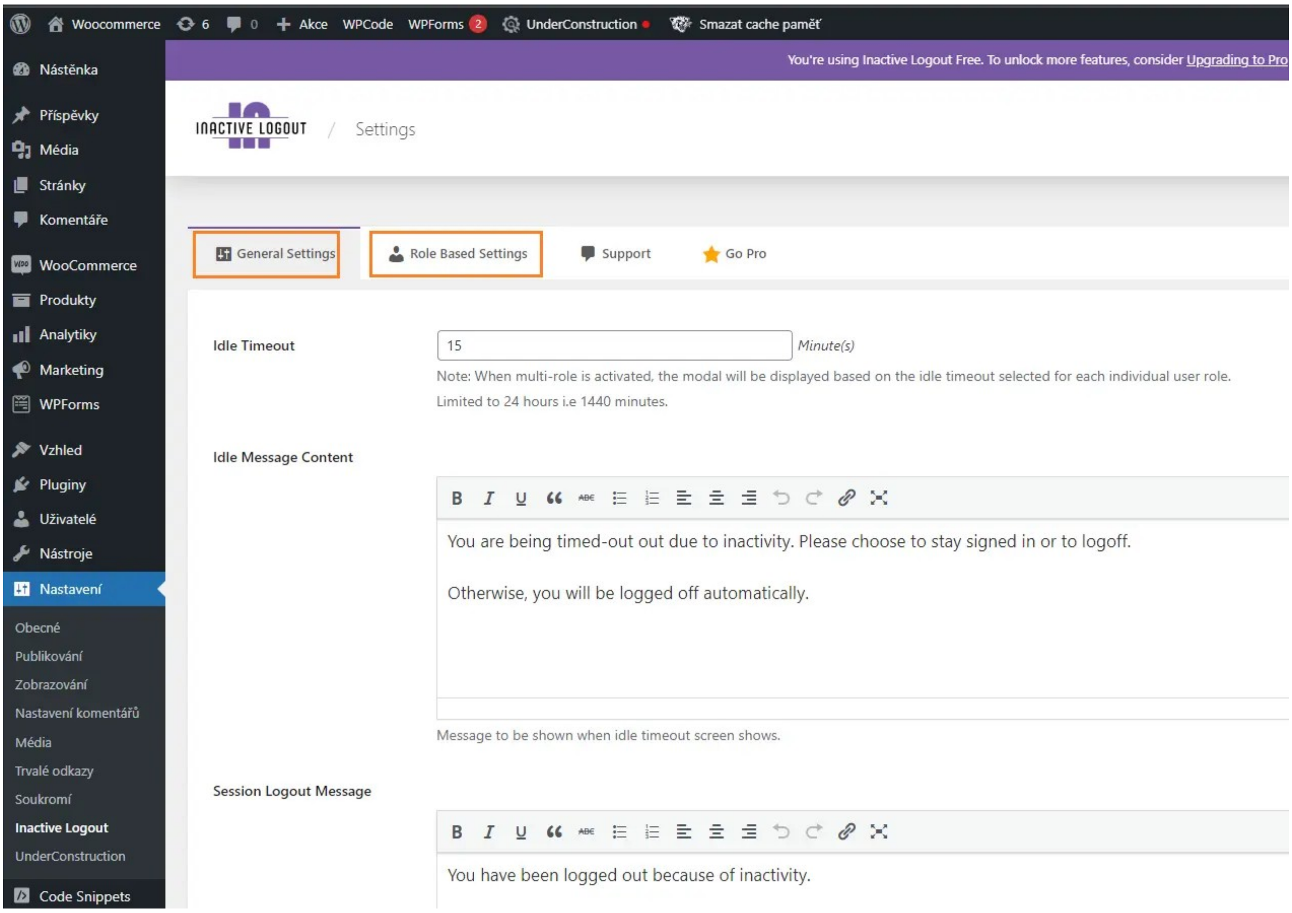
Inactive Logout
Logs out users within defined time when inactive. Modify to show only wake up message and not log out as well. Supported for multisites as well.
Autor: Deepen Bajracharya
★★★★☆ (104) Poslední aktualizace: před 1 měsíc
Aktivní instalace: 10 000+ ✓ Kompatibilní s aktuálně používanou verzí WordPressu

Historie přihlášení uživatele
Helps you to know your website's visitors by tracking their login related information like login/logout time, country, browser and many more.
Autor: Er Faiyaz Alam
★★★★★ (25) Poslední aktualizace: před 3 měsíce
Aktivní instalace: 20 000+ ✓ Kompatibilní s aktuálně používanou verzí WordPressu

Only one device login limit
Limit login to one device at a time for a user. Configured options from the admin
Autor: addonspress
★★★★★ (13) Poslední aktualizace: před 2 roky

Tavakal – Destroy user sessions
Free light plugin to kick out user after being afk, or inactive for long time even if the browser is closed. You can change the time and users roles a ...
Autor: Tavakal4devs
★★★★★ (1) Poslední aktualizace: před 2 roky

Once you activate the plugin, go to its settings. This plugin's settings are hidden in the menu under Settings -> Inactive Logout. This plugin offers several options for securing WordPress. The first option is to set a time limit for all users (recommended), and the second security option is based on user roles. This means that you can set a shorter time limit for the administrator than, for example, a colleague with the contributor role. Additionally, you can always set custom notifications for users approaching the limit or those who have already been logged out. If you are setting logouts based on user roles, you can set up a redirect to the page where those users should be redirected after logout.



You're using Inactive Logout Free. To unlock more features, consider Upgrading to Pro

Idle Timeout: 15 Minute(s)

Note: When multi-role is activated, the modal will be displayed based on the idle timeout selected for each individual user role. Limited to 24 hours i.e 1440 minutes.

Idle Message Content:

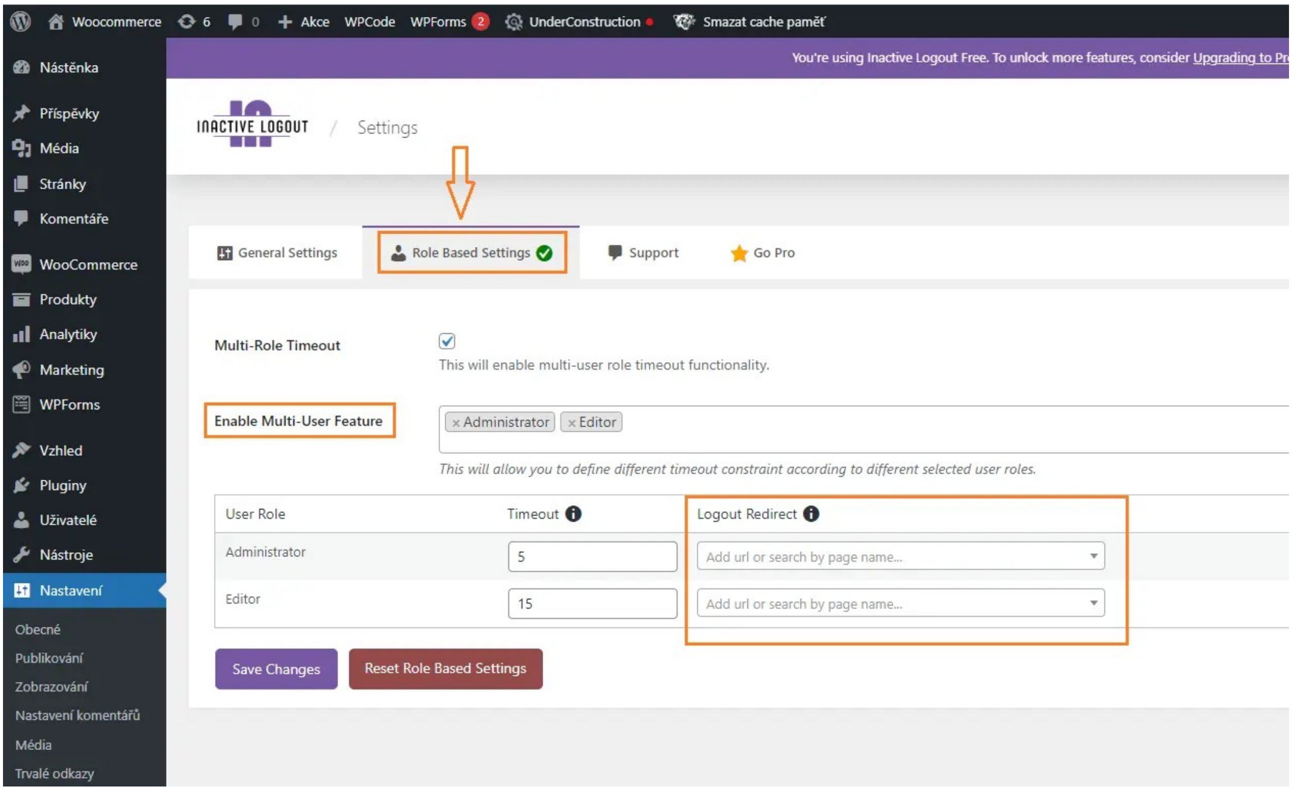
You are being timed-out out due to inactivity. Please choose to stay signed in or to logoff.

Otherwise, you will be logged off automatically.

Message to be shown when idle timeout screen shows.

Session Logout Message:

You have been logged out because of inactivity.



You're using Inactive Logout Free. To unlock more features, consider Upgrading to Pr

Multi-Role Timeout: ☑

This will enable multi-user role timeout functionality.

Enable Multi-User Feature: × Administrator × Editor

This will allow you to define different timeout constraint according to different selected user roles.

User Role	Timeout	Logout Redirect
Administrator	5	Add url or search by page name...
Editor	15	Add url or search by page name...

Password Manager – Safer Storage of Sensitive Data

Now let's deviate a bit from WordPress security to the security of user behavior, specifically regarding passwords and logins. This pertains to the general handling of sensitive data. A common practice for many people is to save passwords and logins in their browser for the sake of convenience.

The browser auto-fills the login and password fields, making it quicker and more convenient, but also very risky. It doesn't make much sense to come up with long, complex, and hard-to-remember passwords when anyone with access to your browser can log in. Consider such behavior as highly risky in general.

For securing WordPress and your overall online account portfolio, the best practice is to abandon this habit and start using a password manager. It's just as convenient and fast, but dramatically more secure. All your passwords and logins are stored in the password manager, which is additionally protected by another layer of security.
How does it work exactly? You install a password management program on your computer and then add its extension to your browser.

The browser extension continues to fill in passwords for you. However, the condition is that you must first launch the password manager program and log in to it. And what huge advantage does it actually offer? You only need to remember one single password – the one for your password manager. The program remembers the rest. This way, you can effortlessly use very complex passwords for all your online applications, and you'll never forget them thanks to the password manager.

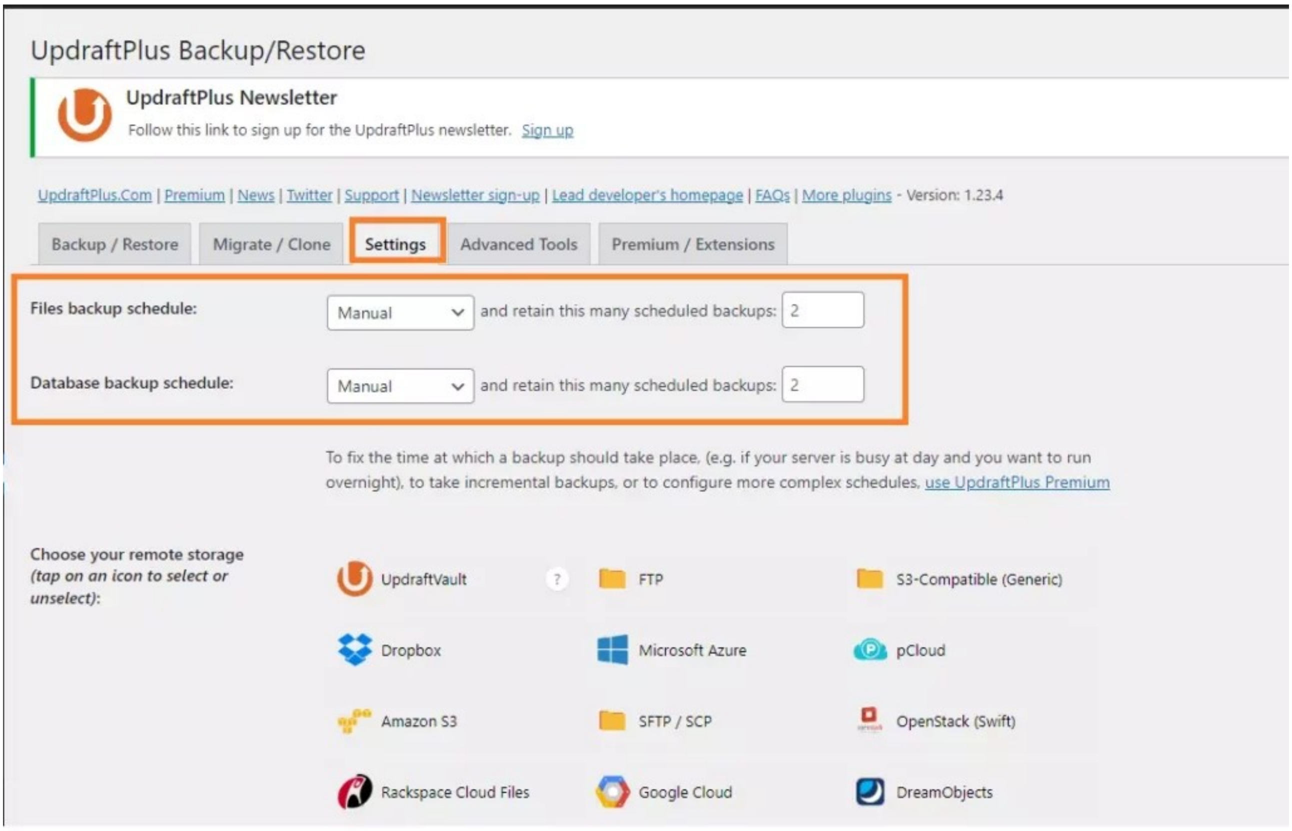
Among the best and thoroughly tested password managers, I recommend KeePassXC. You can download it from here: KeePassXC.

How to Secure WordPress with Automatic Data Backup

Data backup is a timeless topic that very few people actually adhere to. The security of your website begins where you have the assurance that your data is safe. This means that the best situation arises when you have backups of your website data stored in a place that attackers cannot easily access. It could be encrypted cloud storage like OneDrive or Google Drive, or it could be your private offline SSD disk stored at home in a desk drawer.

Regarding WordPress security, the best method of backup is one that happens automatically on its own. For this purpose, there are many plugins available, and among the best, I can recommend Updraft. With Updraft, you can set up periodic backups and also send the created backups directly to remote cloud drives. Never store website backups on FTP. Firstly, it will eventually become an issue for your web hosting provider, as it will fill up your quota. Secondly, storing backups in the same place as your website is foolish. Backups must be separated from the website both geographically and server-wise. This means that the backup must be on a different location, machine, and preferably in a different data center.

If you're interested in how you can activate the Updraft plugin and set up scheduled backups to Google Drive, I've written a separate article on this topic: How to keep your WordPress data safe: best backup plugin. Believe me, for securing WordPress, backups are a crucial element, and you should definitely not underestimate them. Never rely on backups from your web hosting provider. They are usually no more than 14 days old, and you could find out that your website has been compromised even after a month. Then, the backup from your web hosting provider will be useless.



UpdraftPlus Backup/Restore

UpdraftPlus Newsletter

Follow this link to sign up for the UpdraftPlus newsletter. Sign up

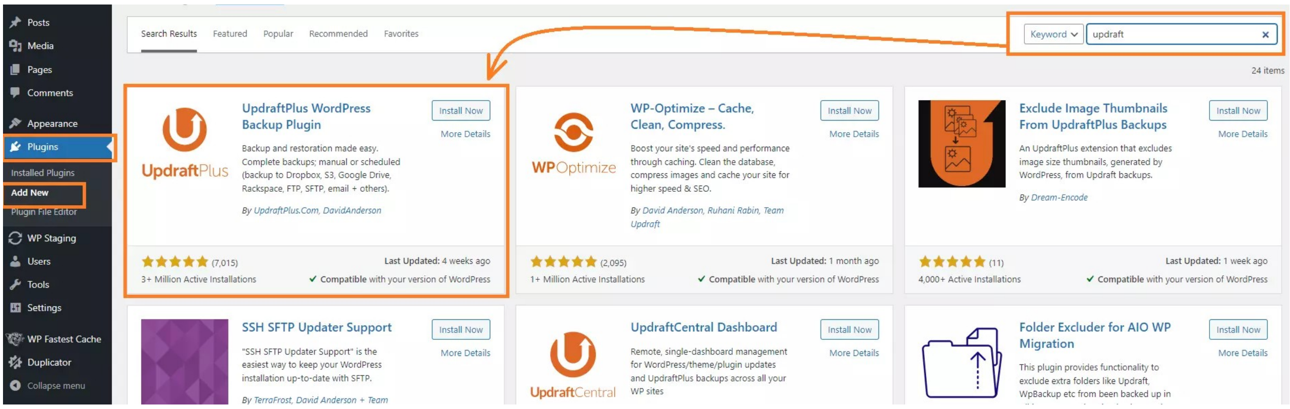
UpdraftPlus.Com | Premium | News | Twitter | Support | Newsletter sign-up | Lead developer's homepage | FAQs | More plugins - Version: 1.23.4

Files backup schedule: Manual and retain this many scheduled backups: 2

Database backup schedule: Manual and retain this many scheduled backups: 2

To fix the time at which a backup should take place, (e.g. if your server is busy at day and you want to run overnight), to take incremental backups, or to configure more complex schedules, use UpdraftPlus Premium

Choose your remote storage *(tap on an icon to select or unselect):*



UpdraftPlus WordPress Backup Plugin

Backup and restoration made easy. Complete backups; manual or scheduled (backup to Dropbox, S3, Google Drive, Rackspace, FTP, SFTP, email + others).

By UpdraftPlus.Com, DavidAnderson

(7,015) Last Updated: 4 weeks ago
3+ Million Active Installations ✓ Compatible with your version of WordPress

WP-Optimize – Cache, Clean, Compress.

Boost your site's speed and performance through caching. Clean the database, compress images and cache your site for higher speed & SEO.

By David Anderson, Ruhani Rabin, Team Updraft

(2,095) Last Updated: 1 month ago
1+ Million Active Installations ✓ Compatible with your version of WordPress

Exclude Image Thumbnails From UpdraftPlus Backups

An UpdraftPlus extension that excludes image size thumbnails, generated by WordPress, from Updraft backups.

By Dream-Encode

(11) Last Updated: 1 week ago
4,000+ Active Installations ✓ Compatible with your version of WordPress

SSH SFTP Updater Support

"SSH SFTP Updater Support" is the easiest way to keep your WordPress installation up-to-date with SFTP.

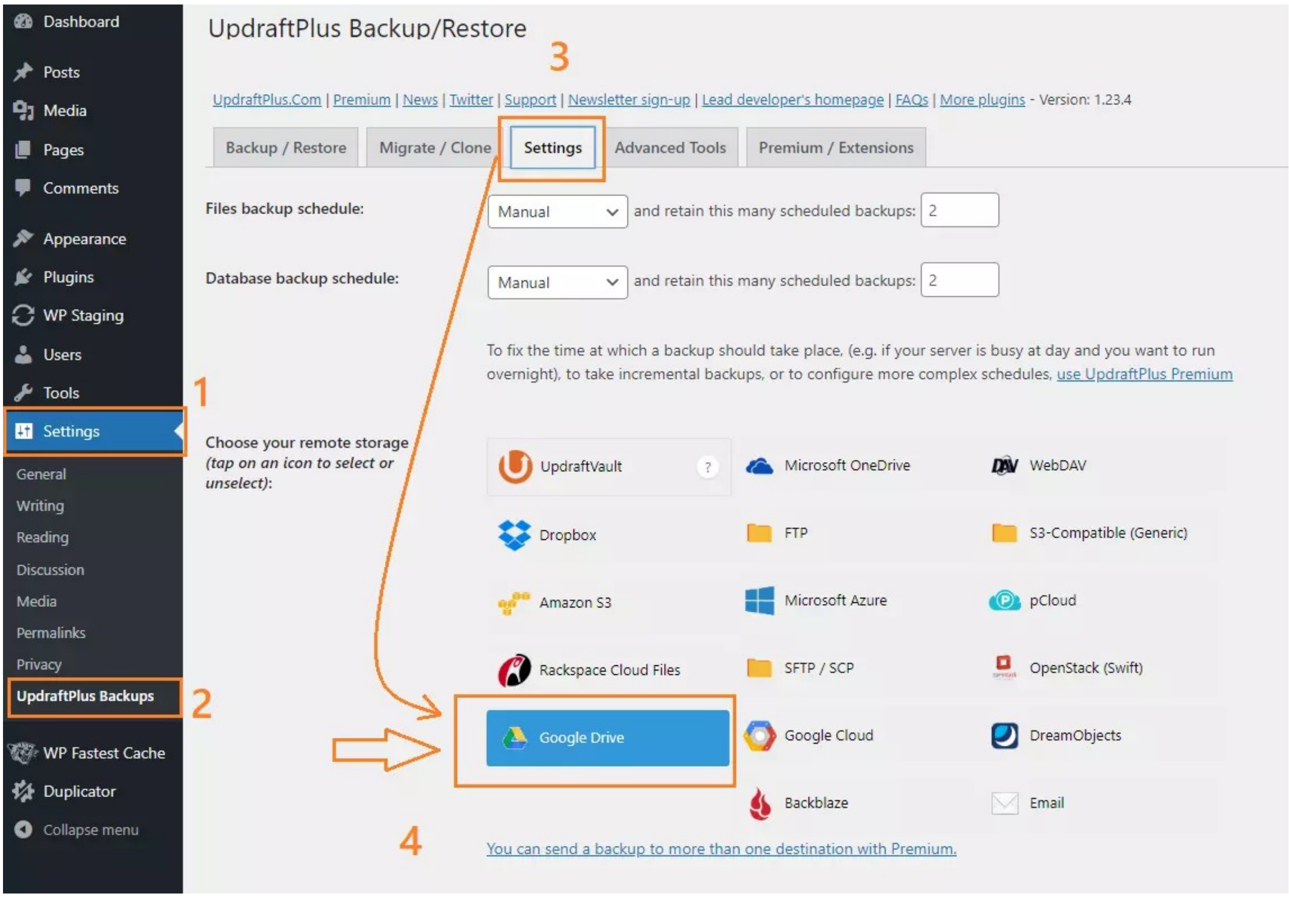
By TerraFrost, David Anderson + Team

UpdraftCentral Dashboard

Remote, single-dashboard management for WordPress/theme/plugin updates and UpdraftPlus backups across all your WP sites

Folder Excluder for AIO WP Migration

This plugin provides functionality to exclude extra folders like Updraft, WpBackup etc from been backed up in



UpdraftPlus Backup/Restore

UpdraftPlus.Com | Premium | News | Twitter | Support | Newsletter sign-up | Lead developer's homepage | FAQs | More plugins - Version: 1.23.4

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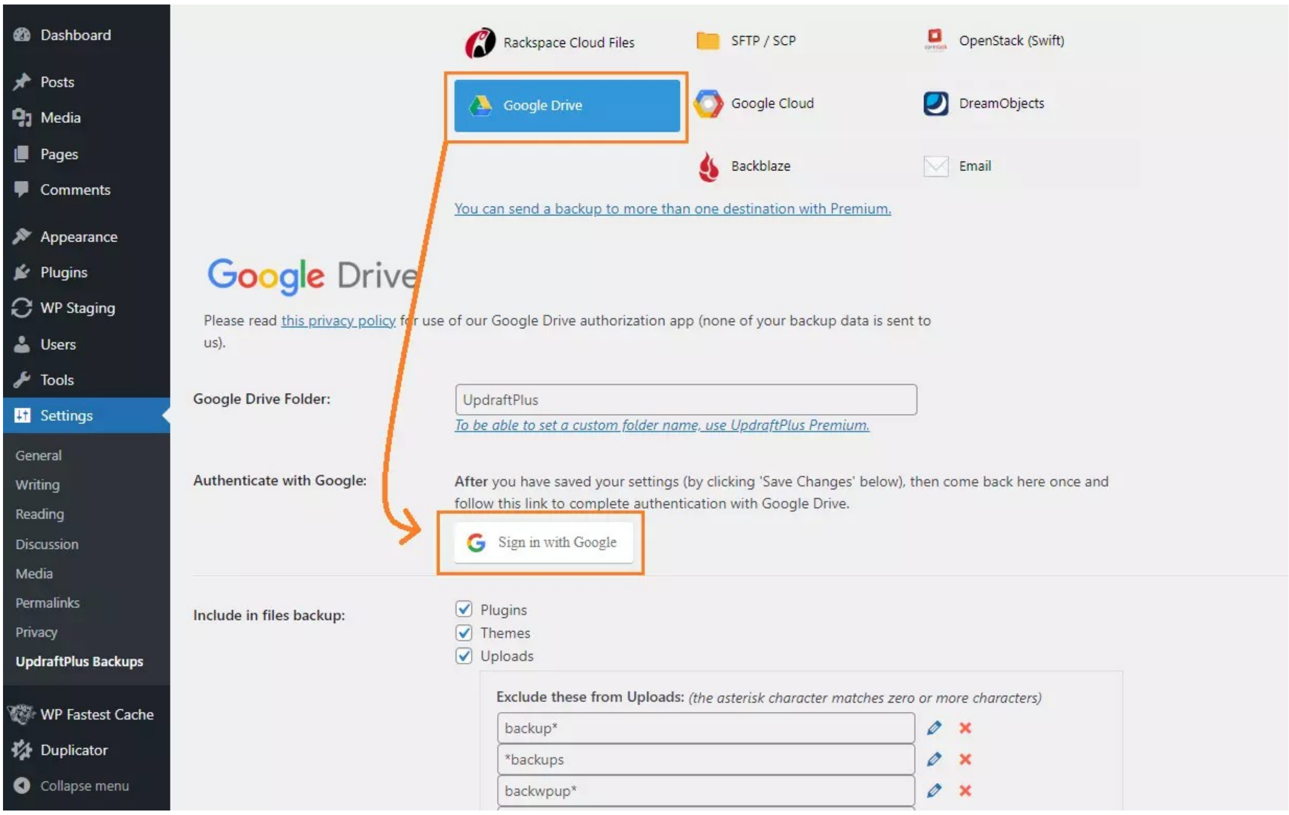
Choose your remote storage *(tap on an icon to select or unselect):*

You can send a backup to more than one destination with Premium.



You can send a backup to more than one destination with Premium.

Please read this privacy policy for use of our Google Drive authorization app (none of your backup data is sent to us).

Google Drive Folder: UpdraftPlus

To be able to set a custom folder name, use UpdraftPlus Premium.

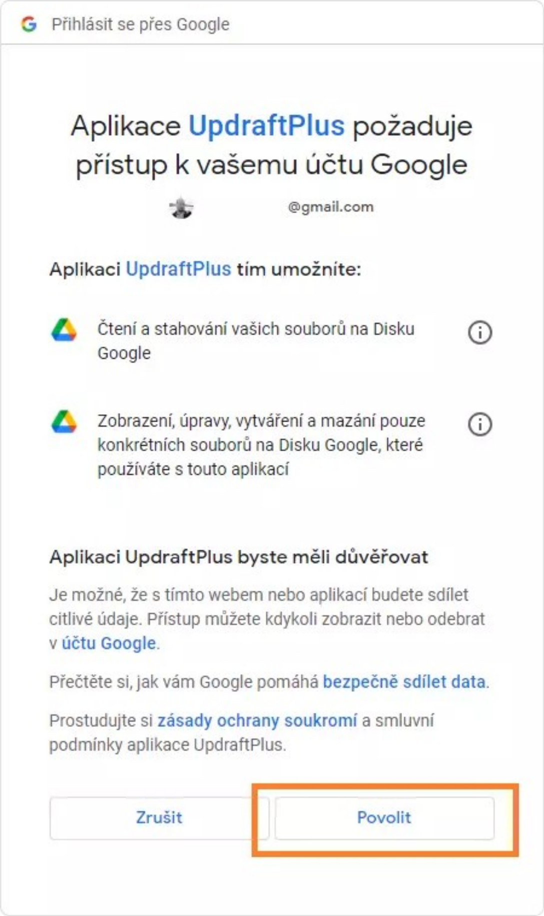
Authenticate with Google: After you have saved your settings (by clicking 'Save Changes' below), then come back here once and follow this link to complete authentication with Google Drive.

Include in files backup:

☑ Plugins
☑ Themes
☑ Uploads

Exclude these from Uploads: *(the asterisk character matches zero or more characters)*

backup*
*backups
backwpup*



Aplikace UpdraftPlus požaduje přístup k vašemu účtu Google

@gmail.com

Aplikaci UpdraftPlus tím umožníte:

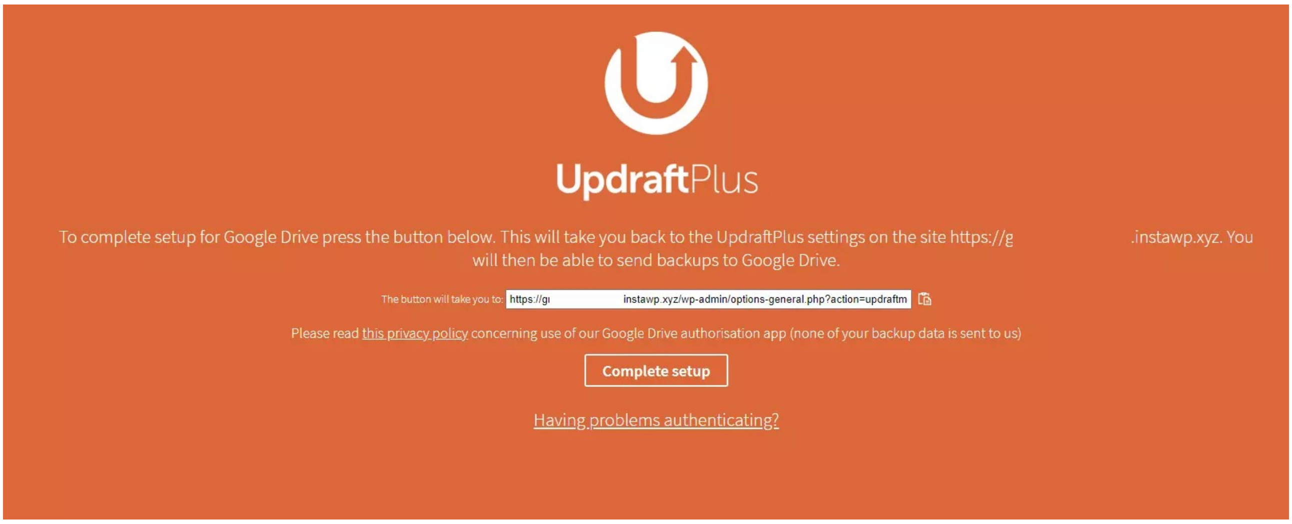
- Čtení a stahování vašich souborů na Disku Google
- Zobrazení, úpravy, vytváření a mazání pouze konkrétních souborů na Disku Google, které používáte s touto aplikací

Aplikaci UpdraftPlus byste měli důvěřovat

Je možné, že s tímto webem nebo aplikací budete sdílet citlivé údaje. Přístup můžete kdykoli zobrazit nebo odebrat v účtu Google.

Přečtěte si, jak vám Google pomáhá bezpečně sdílet data.

Prostudujte si zásady ochrany soukromí a smluvní podmínky aplikace UpdraftPlus.

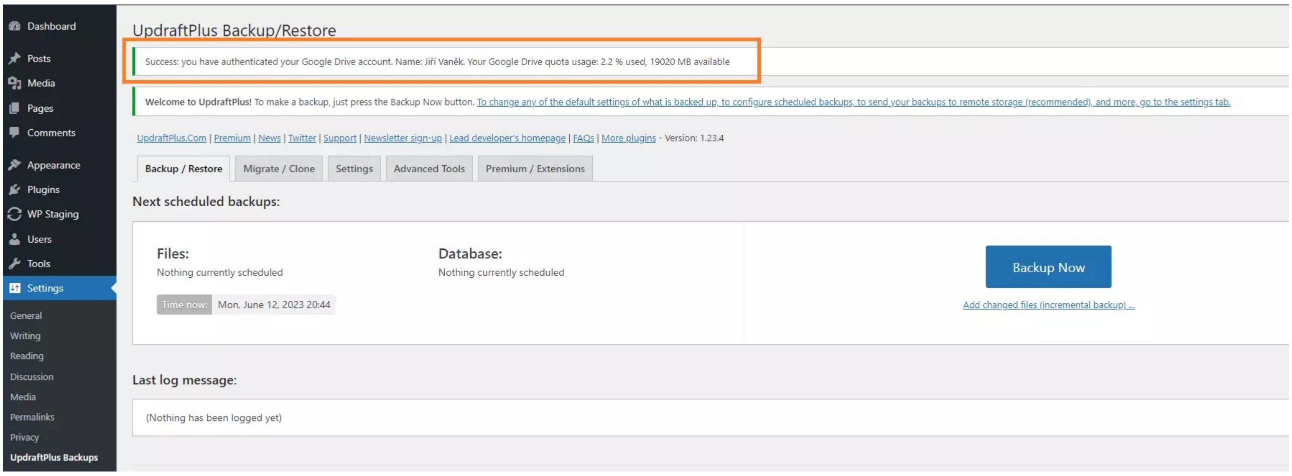


UpdraftPlus

To complete setup for Google Drive press the button below. This will take you back to the UpdraftPlus settings on the site https://g .instawp.xyz. You will then be able to send backups to Google Drive.

The button will take you to: https://gı instawp.xyz/wp-admin/options-general.php?action=updraftm

Please read this privacy policy concerning use of our Google Drive authorisation app (none of your backup data is sent to us)



UpdraftPlus Backup/Restore

Success: you have authenticated your Google Drive account. Name: Jiří Vaněk. Your Google Drive quota usage: 2.2 % used, 19020 MB available

Welcome to UpdraftPlus! To make a backup, just press the Backup Now button. To change any of the default settings of what is backed up, to configure scheduled backups, to send your backups to remote storage (recommended), and more, go to the settings tab.

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Next scheduled backups:

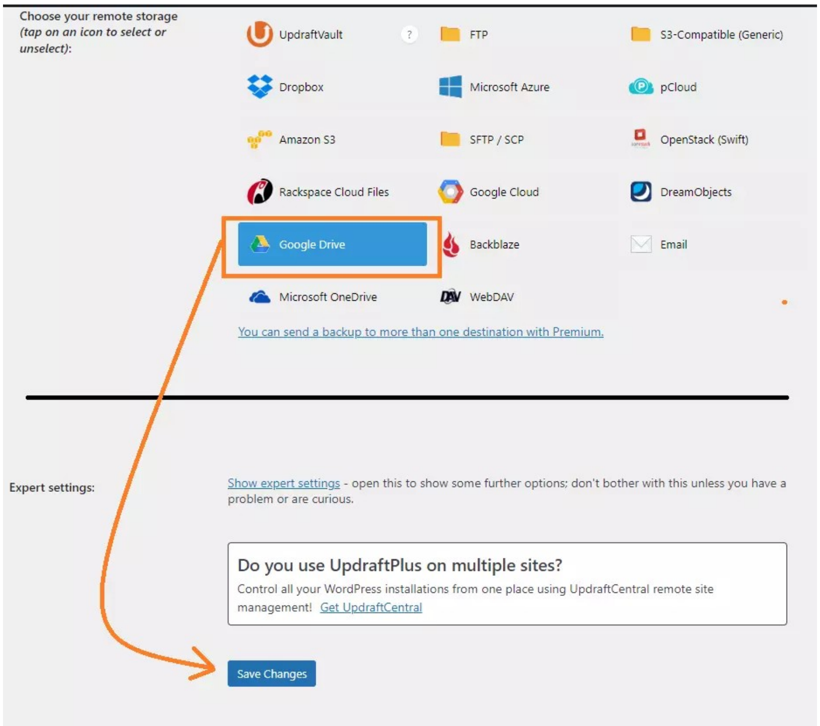
Files:
Nothing currently scheduled

Database:
Nothing currently scheduled

Time now: Mon. June 12, 2023 20:44

Last log message:

(Nothing has been logged yet)



Choose your remote storage *(tap on an icon to select or unselect)*:

You can send a backup to more than one destination with Premium.

Expert settings: Show expert settings - open this to show some further options; don't bother with this unless you have a problem or are curious.

Do you use UpdraftPlus on multiple sites?

Control all your WordPress installations from one place using UpdraftCentral remote site management! Get UpdraftCentral

DNS and Protection Against DDoS Attacks

Now let's talk about DDoS attacks. It's an attack where someone uses a large number of computers in a network to send a huge amount of requests to your website or server. This causes the website or server to become overloaded and the service becomes unavailable. How to defend against it? Often, web hosting providers already have their own solutions, but you can't rely solely on them. If they can't handle the situation, your web hosting may be shut down due to server overload. This is critical when your web hosting is making you money (e.g., an e-commerce site).

That's why I always recommend transferring domain DNS servers to CloudFlare and using their services. Both the paid and free versions. CloudFlare's free tier already has a fairly well-developed defense against DDoS attacks. And how does it all work? CloudFlare hides your target web server's IP address behind a proxy server.

This means that if someone tries to find out the IP address of the machine hosting your web hosting, they will receive the IP address of CloudFlare's proxy server as a response. The DDoS attack will thus be aimed at this IP address instead of your server. And CloudFlare is very good at handling such attacks and filtering them out. The attack won't even reach your server or your web hosting provider's server.
If you're interested in how well CloudFlare can handle large DDoS attacks, check out this article: Google, Amazon and Cloudflare report largest DDoS attacks in history.

A similar service is currently offered by the Czech company WEDOS. It's called WEDOS Global Protection and it's a paid service. Unfortunately, I don't have any experience with it at the moment because I've been using CloudFlare's services all along. However, it's good to mention it here as an alternative.

Protect Your Data Against Theft
The question of intellectual property protection is quite fundamental today. Therefore, if you own a website or a blog, safeguarding your ownership should be a priority. Regarding your web presentation, it's quite common for other entities to copy text or visual content. Hence, it's advisable, if you wish, to implement certain methods to secure your website content against theft. Let's face it, anyone who wants to steal content from a website will find a way, but why make it easy for thieves?

There are two things you should protect on your website: text and images. As for protecting text on the web, I have written a detailed article on this topic here: How To Prevent Text Copying From A WordPress Website.
When it comes to images, it's necessary to disable so-called hotlinking. This means that the image is not physically stolen from the website, but other websites link to it and display it from your location. Simply put, they input the URL address of your image into their code and display it directly from your website or server. Not only do they steal your copyrighted content this way, but they also burden the performance of your website or server. You can prevent hotlinking to images by inserting the following code into your .htaccess file on FTP:

```
#How to secure WordPress against image hotlinking
RewriteEngine on
RewriteCond %{HTTP_REFERER} !^$
RewriteCond %{HTTP_REFERER} !^http(s)?://(www\.)?your-domain.tld [NC]
RewriteCond %{HTTP_REFERER} !^http(s)?://(www\.)?google.com [NC]
RewriteCond %{HTTP_REFERER} !^http(s)?://(www\.)?bing.com [NC]
RewriteCond %{HTTP_REFERER} !^http(s)?://(www\.)?yandex.com [NC]
RewriteCond %{HTTP_REFERER} !^http(s)?://(www\.)?seznam.cz [NC]
RewriteRule \.(jpg|jpeg|png|gif|webp)$ – [NC,F,L]
```

In the rules, replace the item your-domain.tld with the name of your domain. This code prohibits linking to images on your website by everyone except your domain and the search engines Google, Bing, Yandex, and Seznam. This way, you won't prevent search engines from linking to your images. Thieves, however, will be out of luck.

How to secure WordPress against spam

If you have a WordPress website, you probably use forms as well. There can be several types of forms, such as a comment form under a post, a contact form, or a login form. And all these forms need to be secured against spam robots. There are many solutions to avoid spam robots. Personally, I use a solution that includes protection for all these forms in one plugin. It's called WP Armour – Honeypot Anti Spam.

I've been using this plugin for more than two years on all the websites I've created, and so far, I haven't encountered a single spam on any of the websites.

So, I can rightfully consider this plugin to be very high-quality. Moreover, beginners will appreciate it because it doesn't require any configuration. This plugin is simply installed and activated. You can install the plugin like this:

- In the WordPress dashboard, click on the “Plugins” button in the left menu.
- In the new menu, click on the “Add New” option.
- Now, in the top right corner, type the key phrase “honeypot” or “WP Armour” into the search field.
- WordPress will search for the plugin.
- Install the plugin and then activate it.

This plugin will protect you against spam robots specifically for:

- WordPress comments
- WordPress registration form
- BBPress forum (bbpress.org)
- Contact Form 7 plugin (wordpress.org/plugins/contact-form-7)
- Gravity Forms plugin
- best comment plugin WPForms (wpforms.com)
- Formidable Forms (formidableforms.com)
- Caldera Forms (calderaforms.com)
- Toolset forms (toolset.com)
- Elementor forms (elementor.com)
- Fluent Forms (fluentforms.com)
- Divi Theme contact form (elegantthemes.com)
- Theme My Login (https://wordpress.org/plugins/theme-my-login/)
- WooCommerce Reviews Pro

I also see it as a great advantage that WP Armour is fully GDPR compliant. It doesn’t contain any tracking, cookie storage, or calls to an external server. So, if you want to secure WordPress against unwanted spam, I recommend this plugin as the first choice. It does more work and is much more effective than Google reCAPTCHA.

Update – it will significantly strengthen WordPress security

WordPress is a modular system. You get it in some basic state and with the help of modules, called plugins in WordPress, you further expand the system with features that are not native to the system. The same usually happens with the theme template. If you don't want the default set of templates, you usually reach for an external one from the official or unofficial WordPress repository and install it on your website.

Updates are released for all these WordPress add-ons. And not just for them. WordPress itself occasionally releases a package for an update. Either as a minor update for minor changes (**6.3.1 -> 6.3.2**), or as a major update when the entire version changes (**6.3 -> 6.4**, etc.). So you can update:

- WordPress Core
- Plugins
- Themes

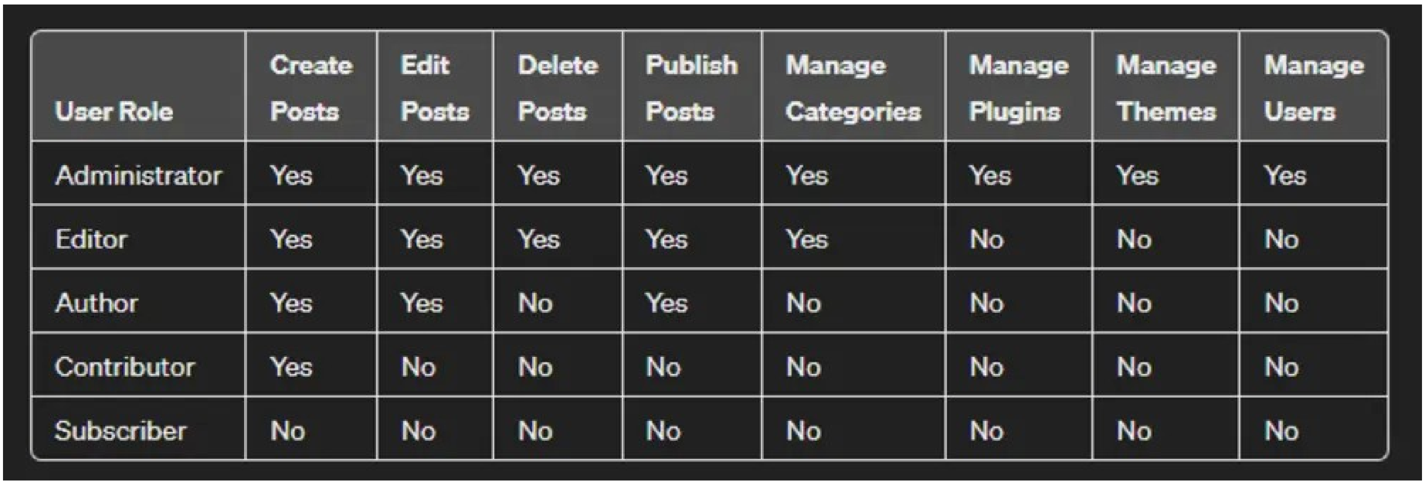
Updates are released for a simple reason. Either they bring new features to the system or addon, or they fix discovered bugs. The second reason is key for us. Bug fixes. If a security vulnerability is found in a plugin, theme, or the system core itself, the developer of that part responds by fixing such a bug. The system will alert you to a new update for that part, and by performing the update, you will also fix the bug found. If you don't perform updates, you expose your website to a huge risk of potential security issues.

Why are updates important in the context of securing WordPress?

Let's see how I, as a hacker, would proceed if I wanted to attack your website. Using online tools like https://builtwith.com, I would first determine what your website is built on and what plugins it uses. I would also find out which plugins you have on your website. Then, I would look at the security vulnerabilities discovered in those plugins and try to exploit them. If you don't update, you would leave the door open to attack. However, if you perform updates, you will have the discovered vulnerabilities fixed by the update, and I will probably go looking for "luck" elsewhere.
So what does this mean? That the entire system is only as strong as its weakest part. Updates help protect your system from discovered security issues, and securing WordPress is primarily based on not ignoring updates.

Do you have multiple users? Consider dividing user roles. It will significantly strengthen WordPress security.

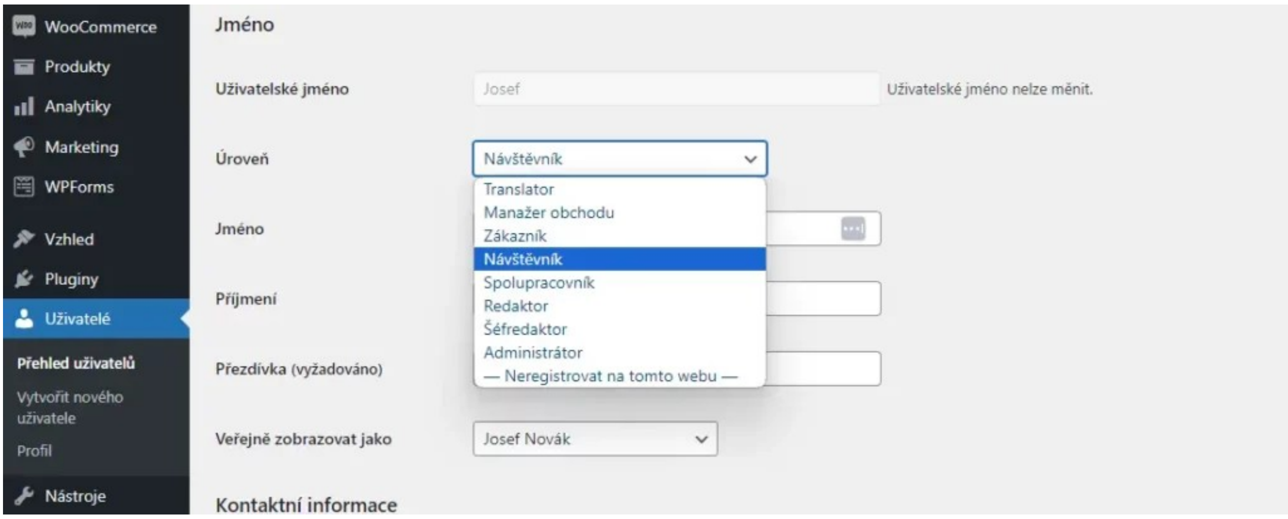
Just as I wrote a moment ago about WordPress being a modular system, it is equally a multi-user system. This means that it can have many users, and they should have properly configured roles for optimal security. Each role in the system has certain permissions. The highest role is the website administrator with all rights, while the smallest role is the visitor (who has almost no rights in the system). WordPress natively distinguishes these user roles:



User Role	Create Posts	Edit Posts	Delete Posts	Publish Posts	Manage Categories	Manage Plugins	Manage Themes	Manage Users
Administrator	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Editor	Yes	Yes	Yes	Yes	Yes	No	No	No
Author	Yes	Yes	No	Yes	No	No	No	No
Contributor	Yes	No	No	No	No	No	No	No
Subscriber	No	No	No	No	No	No	No	No

Therefore, it is exceedingly important for you to assess all users of your system and what activities they perform for the website. Based on that, assign user roles to them. From a WordPress security perspective, practice the principle of least privilege. This means always assigning the lowest possible permissions to users that still allow them to carry out their tasks. Any additional permissions beyond their work scope are unnecessary and potentially risky.

If you are interested in user roles and specific permissions that users can have in the system, take a look at this article where I describe these roles in more detail: Users and User Permissions in WordPress.



Jméno

Uživatelské jméno: Josef — Uživatelské jméno nelze měnit.

Úroveň: Návštěvník

Jméno

Příjmení

Přezdívka (vyžadováno)

Veřejně zobrazovat jako: Josef Novák

Kontaktní informace

Security Plugins (Securing WordPress with Sucuri or WordFence)

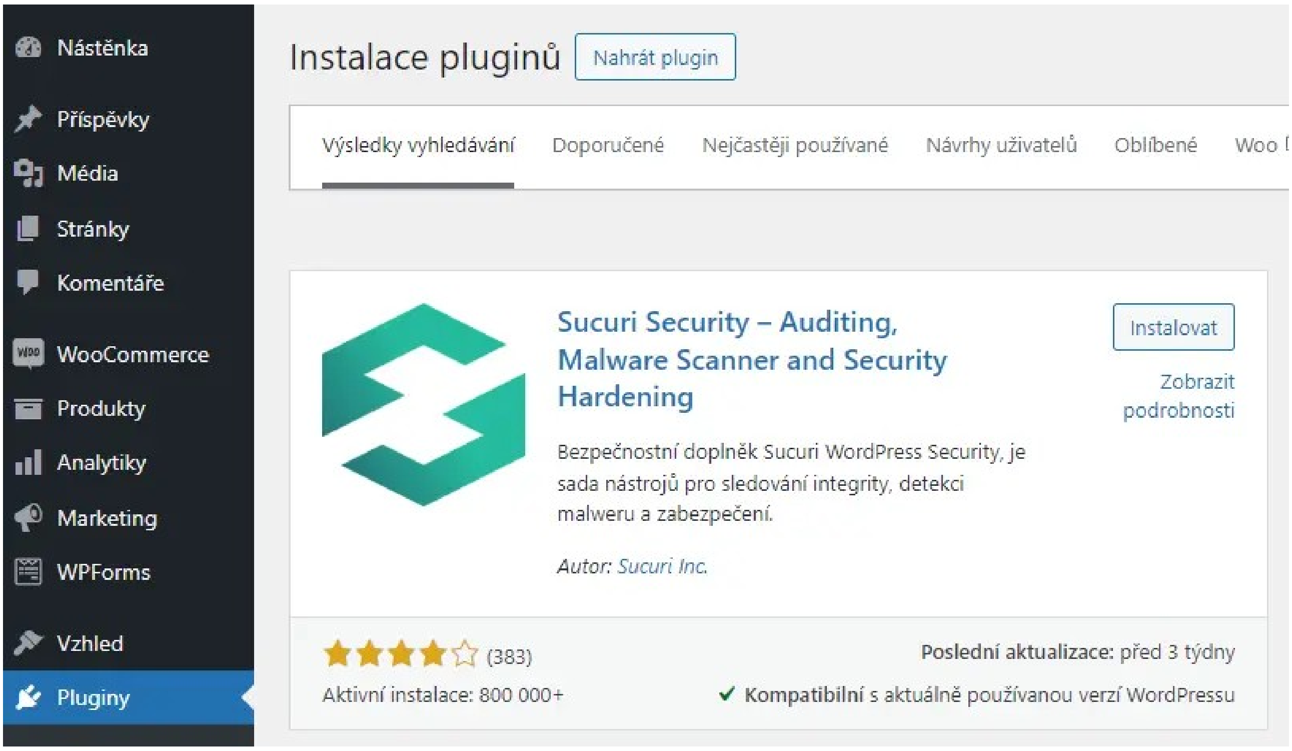
As the last matter on the topic of securing WordPress, I left plugins. Why are they at the bottom of the list? Because many people, without performing the basic WordPress security described above, rely on a plugin to protect their website. Unfortunately, that's not the case at all. Plugins like Sucuri or WordFence can indeed enhance the security of a website, but they are not self-sufficient unless you implement the steps described in this article.

Therefore, consider these plugins only as additional security measures and not as essential ones. If you follow the steps outlined above, I dare say you will never need such plugins.

Sucuri

The Sucuri Security – Auditing, Malware Scanner, and Security Hardening plugin can be found in the official repository here: Sucuri Scanner. You can install the plugin using the standard procedure from the WordPress admin area through the plugins section. This plugin specifically offers the following features:

- Security activity audit
- File integrity monitoring
- Remote malware scanning -Blocklist monitoring
- Effective hardening -Security actions after a hack -Security notifications - Website firewall (premium)



Instalace pluginů

Sucuri Security – Auditing, Malware Scanner and Security Hardening

Bezpečnostní doplněk Sucuri WordPress Security, je sada nástrojů pro sledování integrity, detekci malweru a zabezpečení.

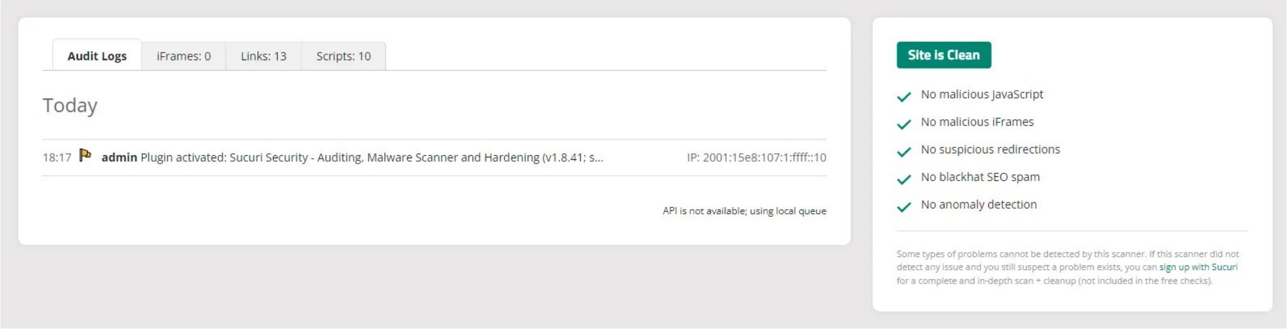
Autor: Sucuri Inc.

★★★★☆ (383)

Aktivní instalace: 800 000+

Poslední aktualizace: před 3 týdny

✓ **Kompatibilní** s aktuálně používanou verzí WordPressu



Today

```
18:17 admin Plugin activated: Sucuri Security - Auditing, Malware Scanner and Hardening (v1.8.41; s...    IP: 2001:15e8:107:1:ffff::10
```

API is not available; using local queue

✓ No malicious JavaScript
✓ No malicious iFrames
✓ No suspicious redirections
✓ No blackhat SEO spam
✓ No anomaly detection

Some types of problems cannot be detected by this scanner. If this scanner did not detect any issue and you still suspect a problem exists, you can sign up with Sucuri for a complete and in-depth scan + cleanup (not included in the free checks).

WordFence

You can get the WordFence plugin at this URL: Wordfence Security – Firewall, Malware Scan, and Login Security. This security plugin, similar to Sucuri mentioned above, can handle the following activities:

- WAF (Web Application Firewall)
- Real-time firewall (premium)
- Malware scanner
- Protection against Brute Force attacks
- Repair of files overwritten by malware
- Website content security check

- Many others

Both plugins can address a situation where a website is attacked and needs to be cleaned of malicious code. However, personally, I believe you can never trust the result as much as when you have an unaffected backup of the website available. That is always the easiest and simplest solution to the situation at hand. Additionally, many features of both plugins are paid, so you will either have to pay for these plugins or use them in their basic free version. The free version does not provide as much website protection as when you secure WordPress yourself from the beginning. Therefore, I mention both plugins at the end of the article and only as one of the options.

How to Secure WordPress – Conclusion

As you can see, securing WordPress is indeed a very complex task, involving many parameters of protection. This concerns not only administration but also users and their behavior, files on FTP, database, and the entire system. As you may have understood from the above article, it is crucial to regularly take care of your system. Updates are key. An outdated system is a huge risk, inviting many hackers to attack your website.

Today, it is very easy to find out what technology your website is running on and what components the website uses. For example, a service like https://builtwith.com can tell a potential attacker a lot about your website. They can focus on your plugins and search for potential vulnerabilities in older, outdated versions. The above rules, if applied and adhered to, will make your WordPress relatively impregnable. However, it is still possible for some damage to occur. Nothing is foolproof. Therefore, back up your data and do it regularly. A backup of an unaffected and unattacked website can solve many long nights spent searching for malicious code on your website. Restoring the website from a backup is a matter of minutes, and the problem is solved.

FAQ – Frequently Asked Questions – How to Secure WordPress

What is the most common way hackers penetrate WordPress sites?

Hackers often exploit weak passwords, outdated plugins, or templates with security vulnerabilities. They also use brute-force attacks on administration login forms.

How can I enhance the security of my WordPress website?

You can strengthen your website's security by using strong passwords, regularly updating WordPress, plugins, and themes. Security can also be improved by installing security plugins, securing files and databases. Regularly back up your website content.

What should I do if my WordPress is attacked?

If your website is attacked, put your WordPress into maintenance mode to avoid harming potential users of your website. Then analyze the vulnerability and take measures to ensure that a similar incident does not occur again. If you have a backup of the unaffected website, restore the website from the backup and then secure your WordPress according to the steps outlined in this article.

What are the best practices for managing user passwords in WordPress?

Best practices include:

- using strong and unique passwords
- enabling two-factor authentication
- regularly changing passwords
- limiting login attempts
- using a password manager instead of saving passwords in the browser

Is it important to regularly update WordPress and its plugins?

Yes, regular updates of WordPress and plugins are crucial to ensure the security of your website. Updates often include fixes for security vulnerabilities.

How can I protect my WordPress website from brute-force attacks?

You can protect your website from brute-force attacks by using plugins that limit the number of unsuccessful login attempts, using strong passwords, and implementing two-factor authentication.

How can I verify if the plugins and themes I use are secure?

You can use online tools such as Sucuri or WordFence to check the security of WordPress, plugins, and themes. It is also important to monitor updates and reviews from users.

Is it important to back up WordPress and data on the website?

Yes, regular backups are important in case your website is attacked or experiences a failure. You should back up not only files on FTP but also the database. There are many plugins that will perform regular backups for you and store them in cloud storage such as Google Drive, One Drive, etc. Among the best are plugins like Updraft.

How can I secure my administrator account in WordPress?

You can protect your administrator account by using a strong password, enabling two-factor authentication, limiting login attempts, and using a secure internet connection. Also, consider changing the administration URL of your WordPress.

What should I do if I suspect there is malicious code on my website?

If you suspect malicious code, you should immediately perform a check and remove the infection. This may include scanning using security plugins like Sucuri or Wordfence. Also, manually check files on FTP and database tables using the phpMyAdmin tool. If you do not understand the security issues of WordPress, seek expert help. Prices for website disinfection currently range from 1500 CZK to 6000 CZK depending on the extent of the website damage and the expertise of the person performing the disinfection. Demand a guarantee to prevent backdoors and re-infections. If you have a clean backup of the website, restore it and secure WordPress according to the points in the article.

Bonus: How to secure the wp-config.php file in WordPress

The **wp-config.php** file is a crucial part of your website, where WordPress stores highly sensitive information. This includes MySQL database connection details, which are stored in plain text without encryption. Therefore, securing this file is essential to prevent unauthorized access. In this guide, we'll show you a simple method to enhance security by moving the file outside the web directory structure.

Why is securing this file so important?

The **wp-config.php** file is one of the most critical files in WordPress, as it contains key configuration data such as database login credentials, security keys, and other sensitive settings. If an attacker gains access to this file, they can take full control of your website.

By default, **wp-config.php** is located in the root directory of your website, making it potentially accessible via a web browser (although most servers prevent direct access). However, vulnerabilities in plugins, themes, or server misconfigurations can expose this file.

By **moving wp-config.php one level higher** – outside the root directory (to a folder that is not publicly accessible via a browser) -you reduce the risk of unauthorized access. Even if there is a misconfiguration on your server, the file will be outside the public HTTP(S) directory, significantly lowering security risks.

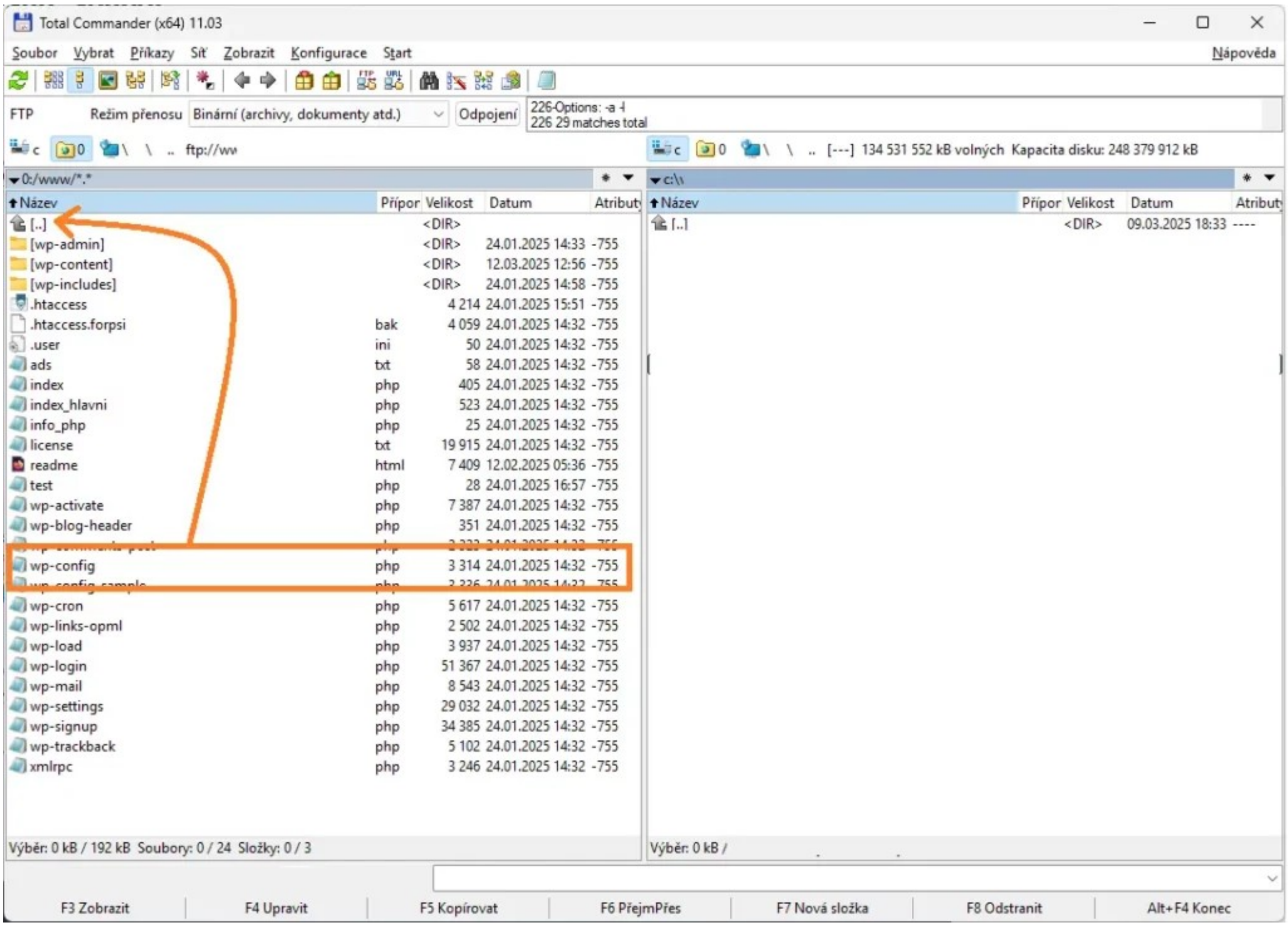
This method is also recommended by the official WordPress documentation as one of the key steps in **hardening your website's security**. You can find more details in the WordPress Hardening Guide.
While this step alone won't protect against all attacks, it's an important security measure. When combined with **regular updates, strong passwords, and server-level access restrictions**, it forms a solid foundation for protecting your WordPress site.

How to Secure the wp-config.php File in WordPress

1. Create a Copy of the File Outside the Web Directory

The first step is to create a copy of the file and move it outside the web directory:

- Log in to your website's FTP using any FTP client.
- Open the folder containing your website (usually **www** or **public_html**).
- Locate the **wp-config.php** file and copy it to your computer.
- Navigate one level above the web folder.
- Upload the copied **wp-config.php** file from your computer to this location outside the web directory.



FTP Režim přenosu: Binární (archivy, dokumenty atd.) Odpojení

226-Options: -a -l
226 29 matches total

ftp://ww

[---] 134 531 552 kB volných Kapacita disku: 248 379 912 kB

0:/www/*.*

Název	Přípor	Velikost	Datum	Atributy
[..]		<DIR>		
[wp-admin]		<DIR>	24.01.2025 14:33	-755
[wp-content]		<DIR>	12.03.2025 12:56	-755
[wp-includes]		<DIR>	24.01.2025 14:58	-755
.htaccess		4 214	24.01.2025 15:51	-755
.htaccess.forpsi	bak	4 059	24.01.2025 14:32	-755
.user	ini	50	24.01.2025 14:32	-755
ads	txt	58	24.01.2025 14:32	-755
index	php	405	24.01.2025 14:32	-755
index_hlavni	php	523	24.01.2025 14:32	-755
info_php	php	25	24.01.2025 14:32	-755
license	txt	19 915	24.01.2025 14:32	-755
readme	html	7 409	12.02.2025 05:36	-755
test	php	28	24.01.2025 16:57	-755
wp-activate	php	7 387	24.01.2025 14:32	-755
wp-blog-header	php	351	24.01.2025 14:32	-755
wp-comments-post	php	2 323	24.01.2025 14:32	-755
wp-config	php	3 314	24.01.2025 14:32	-755
wp-config-sample	php	3 336	24.01.2025 14:32	-755
wp-cron	php	5 617	24.01.2025 14:32	-755
wp-links-opml	php	2 502	24.01.2025 14:32	-755
wp-load	php	3 937	24.01.2025 14:32	-755
wp-login	php	51 367	24.01.2025 14:32	-755
wp-mail	php	8 543	24.01.2025 14:32	-755
wp-settings	php	29 032	24.01.2025 14:32	-755
wp-signup	php	34 385	24.01.2025 14:32	-755
wp-trackback	php	5 102	24.01.2025 14:32	-755
xmlrpc	php	3 246	24.01.2025 14:32	-755

Výběr: 0 kB / 192 kB Soubory: 0 / 24 Složky: 0 / 3

c:\

Název	Přípor	Velikost	Datum	Atributy
[..]		<DIR>	09.03.2025 18:33	----

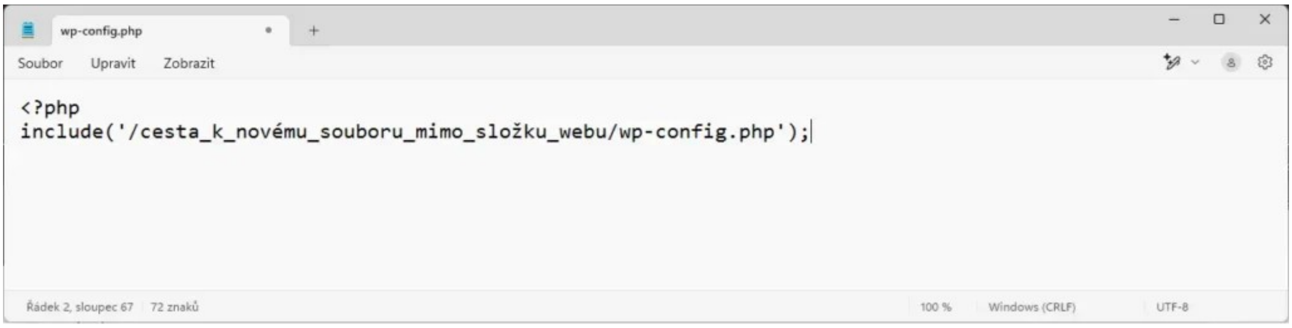
Výběr: 0 kB /

2. Modify the Original wp-config.php File

At this point, you have two WordPress configuration files: one in the web folder (the original) and one outside the web directory, which is not accessible via a browser. Now, go back to the web folder and modify the original **wp-config.php** file:

- Navigate to the folder containing your website.
- Edit the original **wp-config.php** file.
- Delete its existing content and replace it with the following code.
- Make sure to adjust the path to the new file located outside the web directory.

```
<?php
include('/path_to_new_file_outside_root_directory/wp-config.php');
```



```
<?php
include('/cesta_k_novému_souboru_mimo_složku_webu/wp-config.php');
```

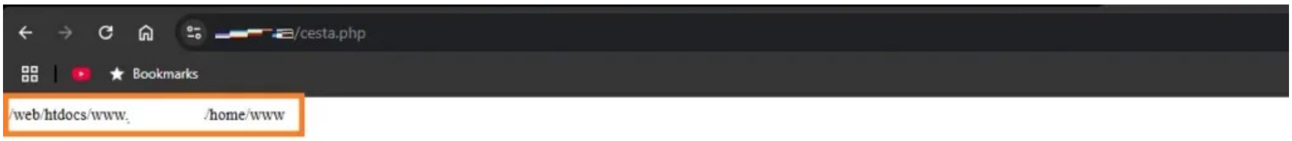
Don't Know How to Find the Path to the New File?

If you're unsure what path to use in the script above, you can use another script to display the paths your web server uses. Follow these steps:

- Create a file named **path.php** using a text editor.
- Insert the following code into the file and save it.
- Upload the **path.php** file to your website's folder.
- Access the file through your browser (**https://yourdomain.extension/path.php**).
- The file will display the absolute path of the folder it is located in.
- Using this displayed path, you'll understand the directory structure of your website on the server.

- If this method doesn’t help, contact your web hosting provider—they should be able to assist you.

```
<?php
echo dirname(__FILE__);
?>
```



[redacted]/cesta.php

```
/web/htdocs/www.              /home/www
```

Want to Further Improve the Security of wp-config.php?

If you want to add an extra layer of protection to your configuration file, you can use the **.htaccess** file:

- Navigate to the folder where you uploaded the copy of **wp-config.php** (outside the web directory).
- Create a new file named **.htaccess** in this folder.
- Insert the following code into the file.

```
<files wp-config.php>
order allow,deny
deny from all
</files>
```

How to Secure the wp-config.php File in WordPress

Conclusion

As you can see, the process is not overly complicated. However, it is highly effective and adds an extra layer of security to your WordPress site. It only takes a few minutes to implement, but the impact on security is significant. The internet is not a safe place, which is why it’s crucial to take proactive steps to protect your website.